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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,134	01/14/2004	James C. Nicholson	72255/00011	3828

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EXAMINER

HANNON, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,134

Applicant(s)

NICHOLSON, JAMES C.

Examiner

Christian A. Hannon

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 22, 23, 32, 33, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 12, 22, 32, 33, 35 and 36 is/are rejected.
- 7) ☒ Claim(s) 5, 11, 21 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-10, 12, 15-19, 22, 32-33, 35-36 are rejected under 35

U.S.C. 102(e) as being clearly anticipated by Reece et al (US 2004/0127247), herein Reece.

Regarding claim 1, Reece teaches an antenna system comprising an antenna element for transmitting and receiving signals at radio frequencies (Figure 3, Item 545; Reece), an antenna connector for establishing a signal connection between the antenna element and a radio component and (Figure 3, Item 530; Reece) an electronic serialization component (ESC) for indicating at least one predetermined antenna characteristic, and adapted to read out the predetermined antenna characteristics through the antenna connector to the radio component is coupled between the antenna element and the antenna connector (Figure 3, Item 540; Reese), wherein the ESC is reprogrammable to allow a change of a value of the at least one predetermined antenna characteristic (Page 3, [0039-0040]; Reece).

With regard to claim 2, Reece teaches the antenna system of claim 1, wherein the predetermined antenna characteristics are selected from a group including at least one of antenna gain, operational frequency band, product model number and type of connection (Page 3, [0039]; Reece).

In regard to claim 3, Reece teaches the antenna system of claim 1, wherein the ESC comprises a circuit, wherein the predetermined antenna characteristics are coded into the circuit (Page 3, [0039]; Reece).

With respect to claim 4, Reece teaches the antenna system of claim 3, wherein the circuit comprises a semiconductor memory chip (Page 3, [0040]; Reece).

Regarding claim 6, Reece teaches the antenna system of claim 1, wherein the antenna element comprises a plurality of antenna elements in an antenna array (Page 2, [0030]; Reece).

In regards to claim 7, Reece teaches a wireless communication device comprising a radio component for exchanging wired electronic signals with wireless signals (Figure 3, Item 501, Page 3, [0036]; Reece), an antenna system comprising an antenna element for respectively transmitting and receiving at RF the wireless signals exchanged with the radio component (Figure 3, Item 545; Reece), an antenna connector for establishing a signal connection between the antenna and the radio component (Figure 3, Item 530; Reece), an ESC for indicating predetermined antenna characteristics, and adapted to read out the predetermined antenna characteristics through the antenna connector to the radio component (Figure 3, Item 540; Reece), wherein the ESC is coupled between the antenna connector and the antenna element

and is responsive to a remote signal to change a value of the predetermined antenna characteristic (Page 3, [0041]; Reece).

With regard to claim 8, Reece teaches the wireless communication device of claim 7 wherein the predetermined antenna characteristics are selected from a group including at least one of antenna gain, operational frequency band, product model number, maximum output power and type of connection (Page 3, [0039]; Reece).

Regarding claim 9, Reece teaches the wireless communication device of claim 7, wherein the ESC comprises a circuit wherein the predetermined antenna characteristics are coded into the circuit (Page 3, [0039]; Reese).

With regard to claim 10, Reece teaches the wireless communication device of claim 7, wherein the circuit comprises a semiconductor memory chip (Page 3, [0040]; Reece).

In regard to claim 12, Reece teaches the wireless communication device of claim 7 wherein the antenna element comprises a plurality of antenna elements in an antenna array (Page 2, [0030]; Reece).

With respect to claim 15, Reece teaches the wireless communications device of claim 7, wherein the radio component comprises at least one algorithm for varying at least one operational parameter in response to the predetermined antenna characteristics (Page 3, [0042]; Reece).

Regarding claim 16, Reece teaches the wireless communications device of claim 15, wherein the predetermined antenna characteristics comprise antenna gain, and

wherein the radio component algorithm sets antenna power so as to maintain antenna gain (Page 3, [0042]; Reece).

With regard to claim 17, Reece teaches the wireless communications device of claim 7, wherein the radio component and antenna system are included in at least one of a wireless access point and bridge for use with WLAN (Page 1, [0018]; Reece).

In regard to claim 18, Reece teaches a method of antenna operation comprising receiving an ID stream from an antenna ESC, processing the ID stream so as to identify at least one predetermined antenna characteristics, varying at least one operation parameters of a radio component in response to the at least one predetermined antenna characteristic and modifying a value of the at least one antenna characteristic of the ID stream stored at the antenna ESC responsive to a remote signal (Page 3, [0039-0040]; Reece). It is noted that the examiner is interpreting signals from the baseband processor to be construed as 'remote' signals.

With respect to claim 19, Reece teaches the method of claim 19, wherein the steps of processing and varying are implemented by an algorithm within the radio component (Page 3, [0039]; Reece).

Regarding claim 22, Reece teaches the method of claim 18, wherein the at least one predetermined antenna characteristic comprises a predetermined antenna component number, and wherein the at least one operational parameter respectively comprises a command to disable the radio component if the predetermined antenna component number is not indicated (Page 4, [0045-0047]; Reece).

With regard to claim 32, Reece teaches the antenna system of claim 1, wherein the ESC is reprogrammable to change value of one of the group consisting of maximum output power and allowable operational frequency band (Page 3, [0039]; Reece), it is noted that gain is inherently indicative of power.

In regard to claim 33, Reece teaches the method of claim 18, wherein the value of the at least one antenna characteristic is one of the group consisting of maximum output power and operating frequency (Page 3, [0039]; Reece), it is noted that gain is inherently indicative of power.

With respect to claim 35, Reece teaches the antenna system of claim 1, wherein the antenna element, ESC and antenna connector are in series (Figure 3, Items 530, 540 & 545; Reece). Furthermore the examiner is interpreting 'series' with no regard to the connotation of electrical series, as the claim does not call for this.

Regarding claim 36, Reece teaches the antenna system of claim 1, the electronic serialization component further comprises a switch, wherein the switch is operable to disable the radio component unless the radio component identifies a correct type of antenna (Page 3, [0042]; Reece). It is noted that the examiner is interpreting 'switch' in a programmatic sense, in that Reece upon not receiving a valid response from the memory chip, ESC, it switches off transmission from the baseband.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13 & 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reece.

Regarding claim 13, Reece teaches the wireless communications device of claim 7, in which the antenna system is for use with a wide variety of antenna types. However Reece fails to explicitly teach wherein the antenna system is an integrally mounted antenna system. However Reece does teach a dipole antenna, which obvious to one of ordinary skill in the art is an integrally mounted antenna (Page 2, [0030]; Reece). Therefore it would have been obvious to utilize the dipole antenna as an integrated mounted antenna in order to provide for a solid structure of the device.

Regarding claim 14, Reece teaches the wireless communications device of claim 7, in which the antenna system is for use with a wide variety of antenna types. However Reece fails to explicitly teach wherein the antenna system is an externally mounted antenna system. However Reece does teach a helix spiral antenna, which obvious to one of ordinary skill in the art is an externally mounted antenna (Page 2, [0030]; Reece). Therefore it would have been obvious to utilize the helix spiral antenna as an externally mounted antenna in order to provide for a broad reception range, characteristic of a helix spiral, to better the device's reception & transmission.

Allowable Subject Matter

5. Claims 5, 11, 21 & 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, Reece teaches the antenna system of claim 3, however Reece fails to teach wherein the circuit comprises a threshold detection circuit for detecting a predetermined voltage threshold, corresponding to a predetermined antenna gain.

With regard to claim 11, Reece teaches the wireless communication device of claim 7, however Reece fails to teach wherein the circuit comprises a threshold detection circuit for detecting a predetermined voltage threshold, corresponding to a predetermined antenna gain.

In regard to claim 21, Reece teaches the method of claim 18, however Reece fails to teach wherein the at least one predetermined antenna characteristics comprises a predetermined radio component operational frequency range.

With respect to claim 23, Reece teaches the method of claim 18, however Reece fails to teach the method further comprising a step of reading predetermined antenna characteristics over a network by a network administrator in a remote location.

Response to Arguments

6. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian A. Hannon whose telephone number is (571) 272-7385. The examiner can normally be reached on Mon. - Fri. 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christian A. Hannon
March 21, 2006



QUOCHIEN B. VUONG
PRIMARY EXAMINER